

AMENDMENT TO THE CLAIMS

1. (Cancelled)

2. to 7. (Cancelled)

8. (Currently Amended) Computer-executable process steps to provide a software application programming interface (API) comprising a, the API providing a common software interface between an application program and plural different types of color measuring devices each having at least one color measuring sensor, and the computer-executable process steps comprising plural functions for operating any of the plural different types of color measuring devices, the process steps plural functions comprising the steps of:

receiving a call to a function from the application program, and

calling a measuring device driver based on the called function to operate a color measurement device,

wherein the plural functions comprise:

a calibrate-position function to calibrate a relative position of a recording medium with respect to any of the plural different types of color measuring devices;

a calibrate-sensor function to calibrate any of the color measuring sensors of any of the plural different types of color measuring devices;

a move-to-patch function to relatively position any of the color measuring sensors and a color patch for any of the plural different types of color measuring devices,

the move-to-patch function being provided with a logical color patch number by the application program; and

a make-measurement function to make a color measurement of the patch at which ~~any of~~ the color measuring sensors is relatively positioned, the make-measurement function providing the application program with a color measurement value for the color patch, and [[;]]

~~wherein in order to complete an operation performed by at least one of the plural functions, the function that performs the operation must be called a number of times which is different for at least two different types of color measuring devices, and wherein for a color measuring device that is being operated, the API provides the application program with flow control data of the number of times that the function must be called.~~

9. (Original) Computer-executable process steps according to Claim 8, wherein the calibrate-position function provides the application program with at least one display value that is to be displayed so as to instruct a user to position the recording medium or to position any of the color measuring sensors.

10. (Original) Computer-executable process steps according to Claim 8, wherein the calibrate-sensor function provides the application program with at least one display value that is to be displayed so as to instruct the user in calibrating the sensor.

11. (Original) Computer-executable process steps according to Claim 8,

wherein the move-to-patch function causes the color measuring device to move any of the color measuring sensors so as to relatively position any of the color measuring sensors and the color patch.

12. (Cancelled)

13. (Original) Computer-executable process steps according to Claim 8,  
wherein the move-to-patch function causes the color measuring device to move the recording medium so as to relatively position any of the color measuring sensors and the color patch.

14. and 15. (Cancelled)

16. (Original) Computer-executable process steps according to Claim 8,  
wherein the make-measurement function provides the application program with at least one display value that is to be displayed so as to instruct the user in making the color measurement.

17. to 20. (Cancelled)

21. (Original) Computer-executable process steps according to Claim 8,  
wherein the plural functions further comprise a get-device-capabilities function to provide

the application program with the flow control data.

22. and 23. (Cancelled)

24. (Original) Computer-executable process steps according to Claim 8,  
wherein the plural different types of color measuring devices include XY tables and hand-held patch readers.

25. (Original) Computer-executable process steps according to Claim 8,  
wherein the plural different types of color measuring devices include spectrometers and densitometers.

26. (Cancelled)

27. (Original) Computer-executable process steps to provide an application programming interface (API), the API providing a common interface between an application program and plural different types of color measuring devices each having at least one color measuring sensor, the computer-executable process steps comprising plural functions for operating any of the plural different types of color measuring devices, the plural functions comprising:

a calibrate-position function to calibrate a relative position of a recording medium with respect to any of the plural different types of color measuring devices, the

calibrate-position function providing the application program with a position-calibration display value that is to be displayed so as to instruct a user to position the recording medium or to position any of the color measuring sensors;

a calibrate-sensor function to calibrate any of the color measuring sensors of any of the plural different types of color measuring devices, the calibrate-sensor function providing the application program with a sensor-calibration display value to the application program, the sensor-calibration display value to be displayed so as to instruct the user in calibrating any of the color measuring sensors;

a move-to-patch function to relatively position any of the color measuring sensors and a color patch for any of the plural different types of color measuring devices, the move-to-patch function being provided with a logical color patch number by the application program, providing the application program with a call-again value in a case that the move-to-patch function needs to be called multiple times to complete the relative positioning of the color measuring sensors and has not yet been called the multiple times, and providing the application program with a move-to-patch display value that is to be displayed so as to instruct the user in positioning any of the color measuring sensors; and

a make-measurement function to make a color measurement of the patch at which any of the color measuring sensors is relatively positioned, the make-measurement function providing the application program with a color measurement value for the color patch, providing the application program with a call-again value in a case that the make-measurement function needs to be called multiple times to complete making the color measurement of the color patch and has not yet been called the multiple times, and

providing the application program with a measurement display value that is to be displayed so as to instruct the user in making the color measurement.

28. (Original) Computer-executable process steps according to Claim 27, further comprising a get-device-capabilities function to provide the application program with a number of times that the calibrate-position function needs to be called so as to calibrate the relative position of the recording medium and to provide the application program with a number of times that the calibrate-sensor function needs to be called so as to calibrate any of the color measuring sensors.

29. (Original) Computer-executable process steps according to Claim 27, wherein the calibrate-position function further provides the application program with a number of times that the calibrate-position function needs to be called so as to calibrate the relative position of the recording medium.

30. (Original) Computer-executable process steps according to Claim 27, wherein the calibrate-position function further provides the application program with a call-again value in a case that the calibrate-position function needs to be called multiple times so as to calibrate the relative position of the recording medium and has not yet been called the multiple times.

31. to 33. (Cancelled)

34. (Original) Computer-executable process steps according to Claim 27, wherein the move-to-patch display value instructs the user to manipulate any of the color measuring devices so as to relatively position any of the color measuring sensors and the color patch.

35. to 71. (Cancelled)

72. (Original) A computer-readable medium storing computer-executable process steps, the computer-executable process steps to provide an application programming interface (API), the API providing a common interface between an application program and plural different types of color measuring devices each having at least one color measuring sensor, the computer-executable process steps comprising plural functions for operating any of the plural different types of color measuring devices, the plural functions comprising:

a calibrate-position function to calibrate a relative position of a recording medium with respect to any of the plural different types of color measuring devices, the calibrate-position function providing the application program with a position-calibration display value that is to be displayed so as to instruct a user to position the recording medium or to position any of the color measuring sensors;

a calibrate-sensor function to calibrate any of the color measuring sensors of any of the plural different types of color measuring devices, the calibrate-sensor function providing the application program with a sensor-calibration display value to the application

program, the sensor-calibration display value to be displayed so as to instruct the user in calibrating any of the color measuring sensors;

a move-to-patch function to relatively position any of the color measuring sensors and a color patch for any of the plural different types of color measuring devices, the move-to-patch function being provided with a logical color patch number by the application program, providing the application program with a call-again value in a case that the move-to-patch function needs to be called multiple times to complete the relative positioning of the color measuring sensors and has not yet been called the multiple times, and providing the application program with a move-to-patch display value that is to be displayed so as to instruct the user in positioning any of the color measuring sensors; and

a make-measurement function to make a color measurement of the patch at which any of the color measuring sensors is relatively positioned, the make-measurement function providing the application program with a color measurement value for the color patch, providing the application program with a call-again value in a case that the make-measurement function needs to be called multiple times to complete making the color measurement of the color patch and has not yet been called the multiple times, and providing the application program with a measurement display value that is to be displayed so as to instruct the user in making the color measurement.

73. (Original) A computer-readable medium according to Claim 72, further comprising a get-device-capabilities function to provide the application program with a number of times that the calibrate-position function needs to be called so as to

calibrate the relative position of the recording medium and to provide the application program with a number of times that the calibrate-sensor function needs to be called so as to calibrate any of the color measuring sensors.

74. to 78. (Cancelled)

79. (Original) A computer-readable medium according to Claim 72, wherein the move-to-patch display value instructs the user to manipulate any of the color measuring devices so as to relatively position any of the color measuring sensors and the color patch.

80. to 97. (Cancelled)

98. (New) A computer-executable method for providing a software application programming interface (API) comprising a common software interface between an application program and plural different types of color measuring devices each having at least one color measuring sensor, and comprising plural functions for operating the plural different types of color measuring devices, the method comprising the steps of:  
receiving a call to a function from the application program, and  
calling a measuring device driver based on the called function to operate a color measurement device,  
wherein the plural functions comprise:

a calibrate-position function to calibrate a relative position of a recording medium with respect to the plural different types of color measuring devices;

a calibrate-sensor function to calibrate the color measuring sensors of the plural different types of color measuring devices;

a move-to-patch function to relatively position the color measuring sensors and a color patch for the plural different types of color measuring devices, the move-to-patch function being provided with a logical color patch number by the application program; and

a make-measurement function to make a color measurement of the patch at which the color measuring sensors is relatively positioned, the make-measurement function providing the application program with a color measurement value for the color patch, and wherein for a color measuring device that is being operated, the API provides the application program with flow control data of the number of times that the function must be called.